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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit:	3748
Confirmation No.:	5747
Application No.:	10/723,172
Title:	TURBOCHARGER WITH WASTEGATE
Inventor:	James A. McEwan
Filing Date:	November 26, 2003
Attorney Docket No:	HOET-16
Examiner:	Thai Ba Trieu

Certificate Under 37 CFR 1.8(a)

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APPEAL BRIEF

Mail Stop Appeal Brief - Patents
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Sir:

Pursuant to the Notice of Appeal filed with the United States Patent Office on March 21, 2006 in connection with the above-indicated application, an Appeal Brief according to 37 CFR § 41.37 is provided. Also enclosed herewith is a Petition to Request a Five Month Extension of Time to and including October 23, 2006, along with

a credit card authorization form for the requisite fee under 37 CFR § 41.20 (b)(2) and 37 CFR § 1.17(a)(3). The Commissioner is authorized to grant any further extensions of time, and charge any deficiency or credit any overpayment to Deposit Account No. 12-2424, but not to include issue fees.

I. REAL PARTY IN INTEREST

Per 37 CFR §41.37(c)(1)(i), Holset Engineering Co. Ltd. is the owner of the present application by written assignment recorded at reel/frame number 010312/0026. The present application is a continuation of the parent application identified in the recorded assignment.

II. RELATED APPEALS AND INTERFERENCES

Per 37 CFR §41.37(c)(1)(ii), the Applicant, the Applicant's legal representative, and the assignee are unaware of any related appeals or interferences which will affect, be directly affected by, or have a bearing on the Appeal Board's decision in the present appeal.

III. STATUS OF CLAIMS

Per 37 CFR §41.37(c)(1)(iii), the status of the claims is as follows. Claims 1-8 and 10-20 are pending. Claims 1-8, and 10-20 stand rejected, and are all being appealed on the grounds further explained hereinafter. Claims 5, and 15-20 have been objected to. Claim 12 was stated to be allowable if rewritten to overcome the rejection under 35 U.S.C. §112, ¶2, and rewritten in independent form. Claim 9 has been cancelled. The claims are presented in Appendix A in accordance with 37 CFR §41.37(c)(1)(viii).

IV. STATUS OF AMENDMENTS

Per 37 CFR §41.37(c)(1)(iv), no amendments have been filed subsequent to taking this Appeal.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Per 37 CFR §41.37(c)(1)(v), the following summarization provides a concise explanation of the subject matter defined in each of the independent claims involved in the appeal. This summarization refers to pages 3-8 of the present application and the figure designations of the present application, and all page and line numbers refer to the corresponding text of the present application.

Independent claim 1 is directed to an apparatus which includes an actuator rod for a turbocharger pressure control assembly as is illustrated in Figs. 1-3 and described on page 5, line14 - page 6, line 30. The actuator rod includes a first elongate portion and a first rod end (indicated with reference numerals 17 and 17a), and a second portion defining a second rod end (indicated with reference numeral 17b) as is described on page 3, lines 20-25 and page 7, lines 9-16. A pivotal joint (indicated with reference numerals 17a/17b) joins the first and second portions to allow a degree of relative pivotal motion between the two portions in at least one plane containing the axis of said elongate first portion as is described on page 3, lines 20-25 and page 7, lines 9-25.

Independent claim 10 is directed to a method of assembling a pressure control assembly of a turbocharger which shares many of the features described in connection

with claim 1 in the preceding paragraph. The method includes assembling the valve assembly and lever arm on the turbine housing, assembling the pneumatic actuator and actuator rod as a sub-assembly, mounting the pneumatic actuator/actuating rod sub-assembly to the turbocharger and securing the second portion of the actuator rod to the lever arm. A description of these features of method claim 10 is found on page 4, lines 5-21 and on page 7, line 17 to page 8, line 17.

Independent claim 14 is directed to an actuator rod for a turbocharger pressure control assembly as is illustrated in Figs. 1-3 and described on page 5, line 14 – page 6, line 30. The actuator rod includes a first elongate portion defining a first rod end (indicated with reference numerals 17 and 17a), and a second portion defining a second rod end (indicated with reference numeral 17b) as is described on page 3, lines 20-25 and page 7, lines 9-16. The first and second portions are pivotally joined to one another to allow a degree of relative pivotal motion between said two portions in at least two orthogonal planes containing the axis of said elongate first portion as is described on page 3, lines 26-28, page 7, lines 9-25, and page 8, lines 26-29.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Pursuant to 37 CFR §41.37(c)(1)(vi), review of the following issues are presented in this appeal:

A. The rejection of claims 1-8 and 10-13 under 35 U.S.C. § 112, ¶ 1 as failing to comply with the enablement requirement.

B. The rejection of claims 2 and 14-20 under 35 U.S.C. § 112, ¶ 1 as failing to comply with the written description requirement.

C. The rejection of claims 1, 3-8 and 14-20 under 35 U.S.C. § 112, ¶ 2 as failing to comply with the definiteness requirement.

D. The rejection of claims 1-2, 5-8, 10, 12-14 and 17-20 under 35 U.S.C. § 103(a) based upon U.S. Patent No. 4,159,815 [sic 5,159,815] to Schlamadinger in view of U.S. Patent No. 4,549,470 to Yogo.

E. The rejection of claims 3-4 and 15-16 under 35 U.S.C. § 103(a) based upon U.S. Patent No. 4,159,815 [sic 5,159,815] to Schlamadinger in view of U.S. Patent No. 4,549,470 to Yogo and further in view of U.S. Patent No. 4,994,660 to Hauer.

VII. ARGUMENTS

Per 37 CFR §41.37(c)(1)(vii), the following arguments are provided in correspondence to the grounds of rejection previously described. Although grouping of the claims is no longer required, individual claims or groups of claims have been provided under separate subheadings to provide for separate consideration per §41.37(c)(1)(vii), and are listed as follows with the corresponding heading or subheading section number parenthetically indicated: claims 1-8 and 10-13 (VII.A), claims 2 and 14-20 (VII.B), claims 1, 3-8, and 14-20 (VII.C), claims 1-2, 5-8, 10, 12-14, and 17-20 (VII.D.1), claims 2, 13, 14 and 17-20 (VII.D.2), claims 3-4 and 15-16 (VII.E), and claim 1 (VII.F). For ease of reference, "Schlamadinger" is used to refer to U.S.

Patent No. 5,159,815; "Yogo" is used to refer to U.S. Patent No. 4,549,470; and "Hauer" is used to refer to U.S. Patent No. 4,994,660.

A. The Board is Urged to Reverse the Enablement Rejection

The rejection of claims 1-8 and 10-13 under 35 U.S.C. § 112, ¶ 1 as failing to comply with the enablement requirement should be reversed. The Examiner's asserted basis for the rejection is:

> In claims 1 and 10, the recitation "at least one plane containing the axis of said elongate first portion" means that more than one plane can contain the axis of said elongate first portion. How can more than one plane contain this axis?

Final Office Action, page 3. Thus, the rejection is based upon the Examiner's belief that more than one plane cannot contain the claimed axis. This belief is incorrect. For example, in Fig. 1 of the present application, the axis of rod 17 is contained in a plane parallel to the surface of the drawing sheet, in a plane perpendicular to the surface of the drawing sheet, as well as in multiple other planes lying at other angles relative to the surface of the drawing sheet.

The Examiner's failure to appreciate that multiple planes can contain an axis does not constitute grounds to support a rejection based upon the enablement requirement of 35 U.S.C. § 112, ¶ 1. "The test of enablement is whether one reasonably skilled in the art could make or use the invention from the disclosures in the patent coupled with information known in the art without undue experimentation." *United States v. Telectronics, Inc.,* 857 F.2d 778, 785, 8 USPQ2d 1217, 1223 (Fed. Cir.

1988). Furthermore, a patent need not teach, and preferably omits, what is well known in the art. *In re Buchner*, 929 F.2d 660, 661, 18 USPQ2d 1331, 1332 (Fed. Cir. 1991).

The Examiner's confusion does not in any way support an enablement rejection. Fig. 1 alone is sufficient to permit a person reasonably skilled in the art to make and use the claimed invention. Once the apparatus of Fig. 1 was made and used, it would have a rod whose axis is contained in multiple planes. There would be no undue experimentation required to make or use this device. A person of reasonable skill in the art need only use Fig. 1 as a template. The same is also true of the embodiments shown in Figs. 2 and 3. The text describing the wastegate valve 12, and actuator rod 17 and their operation also constitutes enabling disclosure of the claimed invention. *See*, Application pages 6-8. Accordingly, the Board is urged to reverse the enablement rejection.

B. The Board is Urged to Reverse the Written Description Rejection

The rejection of claims 2 and 14-20 under 35 U.S.C. § 112, ¶ 1 as failing to comply with the written description requirement should be reversed. The Examiner's asserted basis for this rejection is:

> The claim(s) contain **new subject matter**, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically,
>
> - In claims 2 and 14 the recitation ***"at least two orthogonal planes containing the axis of said elongate first portion"*** does not have support in the original specification.

Final Office Action, page 3. The examiner has the initial burden of presenting by a preponderance of evidence why a person skilled in the art would not recognize in an applicant's disclosure a description of the invention defined by the claims. *In re Wertheim*, 541 F.2d 257, 263, 191 USPQ 90, 97 (CCPA 1976). Furthermore, there is no requirement that the written description be *in haec verba*. *In re Wright*, 866 F.2d 422, 9 USPQ2d 1649, 1651 (Fed. Cir. 1989). Rather written description support for added claim limitations can be found expressly, implicitly or inherently in the originally filed disclosure. *See*, MPEP § 2163.

A person skilled in the art viewing Fig. 1 of the application as filed would recognize that the axis of rod 17 is contained by a plane parallel to the surface of the drawing sheet and by a plane orthogonal to the surface of the drawing sheet and would also recognize that these two planes are orthogonal to one another. Thus, upon examination of Fig. 1, a person skilled in the art would understand that the application describes an invention including "at least two orthogonal planes containing the axis of said elongate first portion."

The examiner has also overlooked statements in the application as filed which provide additional written description. For example, the application as filed states " the spherical rod end joint, [ ] comprises a spherical actuator rod end 17a and a cylindrical rod end piece 17b which provides a socket for the spherical rod end 17a..." *See*, Application, p. 7. The application as filed further states "preferably the joint should allow movement in orthogonal directions ..." *See*, Application, p. 8. This description further indicates to a person skilled in the art that there are "at least two orthogonal planes

containing the axis of said elongate first portion." Since the elongate first portion of the rod connects to a joint that can move in two orthogonal planes, the elongate first portion itself would be contained in two orthogonal planes. Accordingly, the Board is urged to reverse the written description of rejection.

C. The Board is Urged to Reverse the Definiteness Rejection

The rejection of claims 1, 3-8, and 14-20 under 35 U.S.C. § 112, ¶ 2 as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention should be reversed. The basis for the rejection is as follows:

> - In claims 1 and 10, the recitation ***"at least one plane containing the axis of said elongate first portion"*** renders the claim indefinite, since it is not clear **how many more planes** can contain the axis of the elongate first portion. Applicant is required to clarify and explain these planes, which contain the axis of said elongate first potion.
> - In claims 2 and 13-14, the recitation ***"at least two orthogonal planes containing the axis of said elongate first portion"*** renders the claim indefinite, since it is not clear that [sic] how the at least two orthogonal planes can contain the axis of said elongate first portion; as well, such limitation does not have any antecedent basis in the original disclosure. Applicant is required to clarify and explain how the at least two orthogonal planes can contain the axis of said elongate first portion.

Final Office Action, page 4. In reviewing a claim for compliance with 35 U.S.C. 112, ¶ 2, the Examiner must consider the claim as a whole to determine whether the claim apprises one of ordinary skill in the art of its scope and, therefore, serves the notice function required by 35 U.S.C. 112, ¶ 2, by providing clear warning to others as to what

constitutes infringement of the patent. *See, Solomon v. Kimberly-Clark Corp.*, 216 F.3d 1372, 1379, 55 USPQ2d 1279, 1283 (Fed. Cir. 2000).

With respect to claims 1 and 10, the Examiner does not even allege that the claim language at issue, "at least one plane containing the axis of said elongate first portion," fails to apprise one of ordinary skill in the art of its scope or to give adequate notice under 35 U.S.C. § 112, ¶ 2. Instead, the Examiner attempts to base the rejection on an issue that is not raised by the claims, namely how many more planes can contain the axis of the elongate first portion. Applicant has already explained how multiple planes can contain an axis in section VI.A, above, but that explanation is irrelevant to the definiteness of claims 1 and 10. The claims quite definitely recite "at least one plane." The number of additional planes is irrelevant. A person of ordinary skill in the art will have no question that at least one plane is required, and that questions of additional planes are irrelevant. Claims 1 and 10 are in no way indefinite.

The same is also true of claims 2 and 13-14. Applicant has already answered the Examiner's question as to how the at least two orthogonal planes can contain the axis of said elongate first portion. As stated above in section VI.A, in Fig. 1 of the present application, the axis of rod 17 is contained in a plane parallel to the surface of the drawing sheet, in a plane perpendicular to the surface of the drawing sheet, as well as in multiple other planes lying at other angles relative to the drawing sheet. The Applicant has also already explained the antecedent basis in the original specification. As stated above in section VI.B, Fig. 1 and the text on pages 7-8 of the application which describe how the spherical joint of the actuator rod connects the two rod portions

and permits movement in orthogonal directions each provide adequate antecedent basis. For these reasons, the Board is urged to reverse the definiteness rejection.

D. The Board is Urged to Reverse the First Obviousness Rejection

The Board should reverse the rejection of claims 1-2, 5-8, 10, 12-14 and 17-20 under 35 U.S.C. § 103(a) based upon U.S. Patent No. 4,159,815 [sic 5,159,815] to Schlamadinger in view of U.S. Patent No. 4,549,470 to Yogo. The seminal case directed to application of 35 U.S.C. §103 is *Graham v. John Deere*, 383 U.S. 1, 148 USPQ 459 (1966). From this case, four familiar factual inquiries have resulted. The first three are directed to the evaluation of prior art relative to the claims at issue, and the last is directed to evaluating evidence of secondary considerations. See, MPEP §2141.

From these inquiries, the initial burden is on the Patent Office to establish a *prima facie* case of obviousness for which three basic criteria must be met. "First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure." MPEP §2142 (citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)). The suggestion/motivation to combine or

modify under §103 needs to be specific. Where a "statement is of a type that gives only general guidance and is not specific as to the particular form of the claimed invention and how to achieve it ... [s]uch a suggestion may make an approach 'obvious to try' but it does not make the invention obvious." *Ex parte Obukowicz*, 27 USPQ2d 1063, 1065 (U.S. Pat. and Trademark Off. Bd. of Pat. App. & Interferences 1992) (citations omitted). "A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention." MPEP §2141.02 (citing *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983)).

As a preliminary matter, the Examiner has apparently misidentified the primary reference upon which the obviousness rejections are based. The Final Office Action cites "Schlamadinger (Patent No. 4,159,815)" as the primary reference. The identified patent number is not to Schlamadinger, but is instead a reference to Strowik entitled "Arrangement for fine-adjusting the longitudinal position of a vehicle seat." It is believed that the Examiner intends to rely upon U.S. Patent No. 5,159,815 to Schlamadinger, and the Applicant will address the rejection as though this reference had been identified.

1. With Respect to Claims 1-2, 5-8, 10, 12-14 and 17-20, the Examiner Has Misconstrued the Linkage Assembly of Schlamadinger to Be a Portion of an Actuator Rod

With respect to all claims subject to the present rejection (i.e., claims 1-2, 5-8, 10, 12-14 and 17-20), the Examiner has misconstrued the Schlamadinger reference. The examiner asserts that:

> Schlamadinger discloses an actuator rod (25, I, II) for a turbocharger pressure control assembly, the actuator rod comprising a first portion (25, I, II) defining a first rod end and a second portion (28) defining a second rod end, said first and second portions (25, I, II, and 28) being pivotally joined to one another ...

Final Office Action, p. 7. These assertions are contrary to the explicit statements in the Schlamadinger reference. Element 28 is not a second portion of a rod as the examiner asserts. Rather, Schlamadinger expressly states "the opposite end 25b of the rod is pivotably connected to a **linkage assembly 28** which is connected to valve V ..." Schlamadinger, col. 3, lines 5-7 (emphasis added). The Examiner's misunderstanding is confirmed by Fig. 4 which illustrates that linkage assembly 28 is not a portion of actuator rod 25.

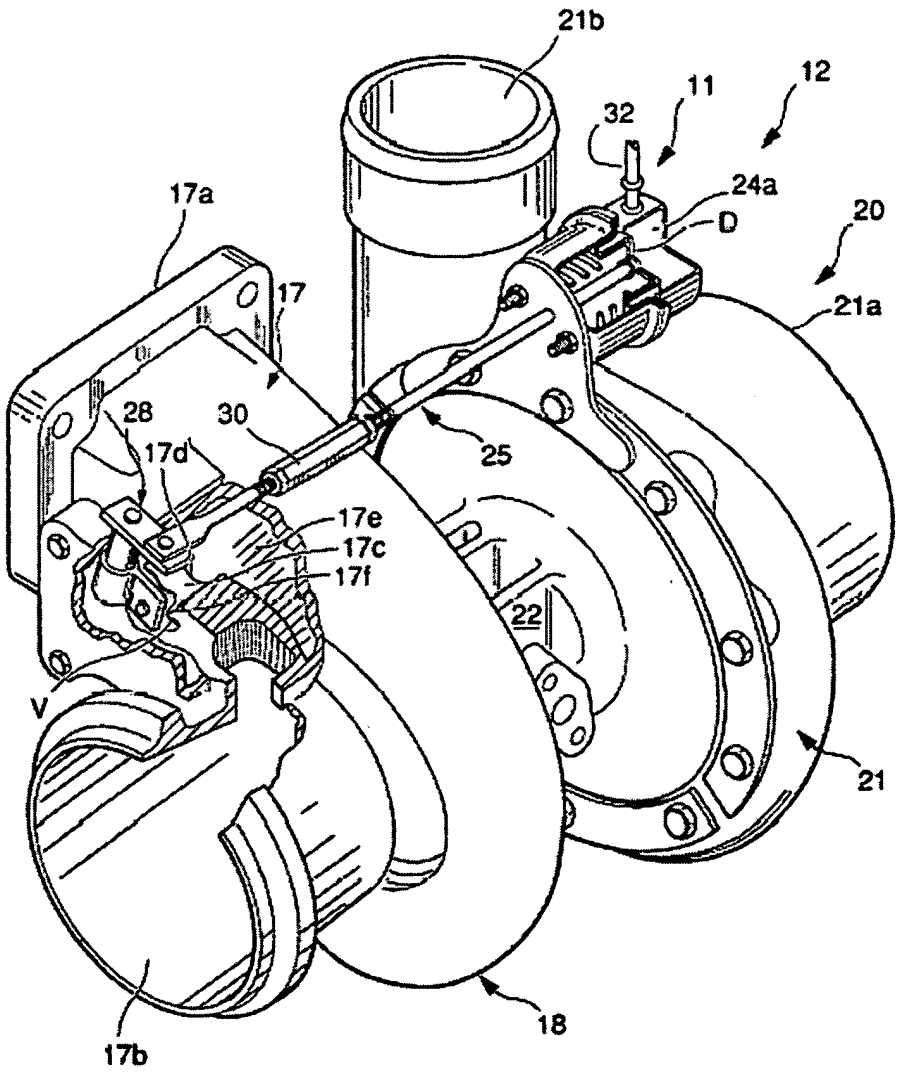


Fig. 4 of Schlamadinger

Schlamadinger also confirms the Examiner's misunderstanding by identifying elements other than element 28 as first and second rod portions, and making clear that the first and second rod portions are not pivotally joined to one another. "The rod 25 may be formed of two sections I and II which are interconnected in endwise relation by an internally threaded sleeve 30." Schlamadinger, col. 3, lines 8-10; *also see*, Fig. 4 (above). Thus, Schlamadinger expressly contradicts the Examiner's rejection—the rod

portions of Schlamadinger are not pivotally interconnected. It appears that the Examiner may have relied upon Fig. 2. But Fig. 2 is a schematic representation which does not depict any actual structure. *See*, Schlamadinger col. 1, lines 66-67.

With respect to the secondary reference, U.S. Patent No. 4,549,470 to Yogo, the examiner does not contend that there is any teaching of an actuator rod having a first portion and a second portion and, in fact, Yogo discloses only a single-portion actuator rod and never teaches or suggests an actuator rod with "first and second portions being pivotally joined to one another."

The consequence of the Examiner's misunderstanding is that no prima facie case of obviousness has been established. As noted above, a prima facie case of obviousness requires, inter alia, that the prior art reference (or references when combined) must teach or suggest all the claim limitations. The references asserted by the Examiner, taken either alone or in combination, fail to teach or suggest an actuator rod with "first and second portions being pivotally joined to one another." For at least this reason, the Board should reverse the first obviousness rejection with respect to all rejected claims.

2. With Respect to Claims 2, 13, 14 and 17-20, the Examiner Has Failed to Appreciate that Schlamadinger Is Limited to a Single Plane of Motion

With respect to claims 2, 13, 14 and 17-20, the Examiner has asserted that Schlamadinger allows a degree of relative pivotal motion "in at least two orthogonal planes containing the axis of said first portion." Final Office Action, p. 7. There is no

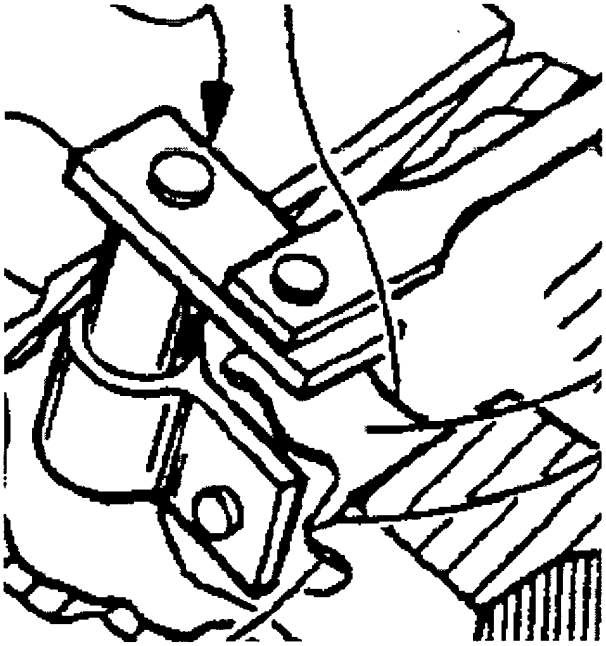
disclosure, teaching or suggestion of this claimed pivotal motion anywhere in Schlamadinger. To the contrary, in Schlamadinger, the motion of the axis of rod 25 is contained in a single plane. As illustrated in Fig. 4 (above) a surface of rod 25 contacts a surface of linkage 28 and a center pin (not numbered) interconnects rod 25 and linkage 28. This arrangement limits the movement of the axis of rod 25 to a single plane. Thus, Schlamadinger not only fails to teach the claimed pivotal motion, but is incapable of performing that motion. With respect to the secondary Yogo reference, the examiner does not contend that Yogo discloses, teaches or suggests the claimed pivotal motion.

The consequence of the Examiner's failure to appreciate that the motion of Schlamadinger is confined to a single plant is that no prima facie case of obviousness has been established. As noted above, a prima facie case of obviousness requires, inter alia, that the prior art reference (or references when combined) must teach or suggest all the claim limitations. The references asserted by the examiner, taken either alone or in combination, fail to teach or suggest relative pivotal motion "in at least two orthogonal planes containing the axis of said first portion." For at least this reason, the Board should reverse the first obviousness rejection with respect to claims 2, 13, 14, and 17-20.

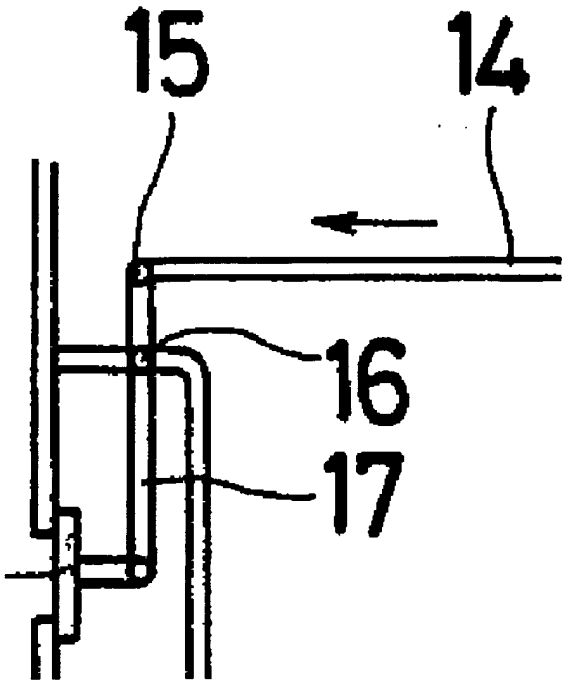
E. The Board is Urged to Reverse the Second Obviousness Rejection

The Board should reverse the rejection of claims 3-4 and 15-16 under 35 U.S.C. § 103(a) based upon U.S. Patent No. 4,159,815 [sic 5,159,815] to Schlamadinger in view of U.S. Patent No. 4,549,470 to Yogo and further in view of U.S. Patent No. 4,994,600 to Hauer. The statements of law presented above in section VII.D are incorporated into this section.

The Federal Circuit has stated "[i]f references taken in combination would produce a 'seemingly inoperable device,' we have held that such references teach away from the combination and thus cannot serve as the basis for a prima facie case of obviousness." *McGinley v. Franklin Sports Inc.*, 262 F.3d 1339, 60 USPQ2d 1001, 1010 (Fed. Cir. 2001). The examiner has proposed a combination that is inoperable. Schlamadinger and Yogo both teach that a rod and a linkage are interconnected by a joint that places the rod and the linkage at right angles relative to one another. This arrangement is illustrated in the portions of Fig. 4 of Schlamadinger and Fig. 1 of Yogo reproduced below.



Portion of Fig. 4 of Schlamadinger



Portion of Fig. 1 of Yogo

The arrangement illustrated above also requires a significant range of movement of the rod relative to the linkage in order to translate the reciprocal motion of the rod to the rotational motion of the linkage.

Hauer teaches a universal joint that cannot be arranged as taught by Schlamadinger and Yogo due to its limited range of motion. "One feature employed throughout various elements is a universal or spherical joint, an example of which is shown in Fig. 9. ... As can be readily seen **the amount of rotation is greatly limited** but not much is needed to effectively vector the thrust in a useful manner." Hauer, col. 6, lines 27-36 (emphasis added); also see Fig. 9 of Hauer shown below.

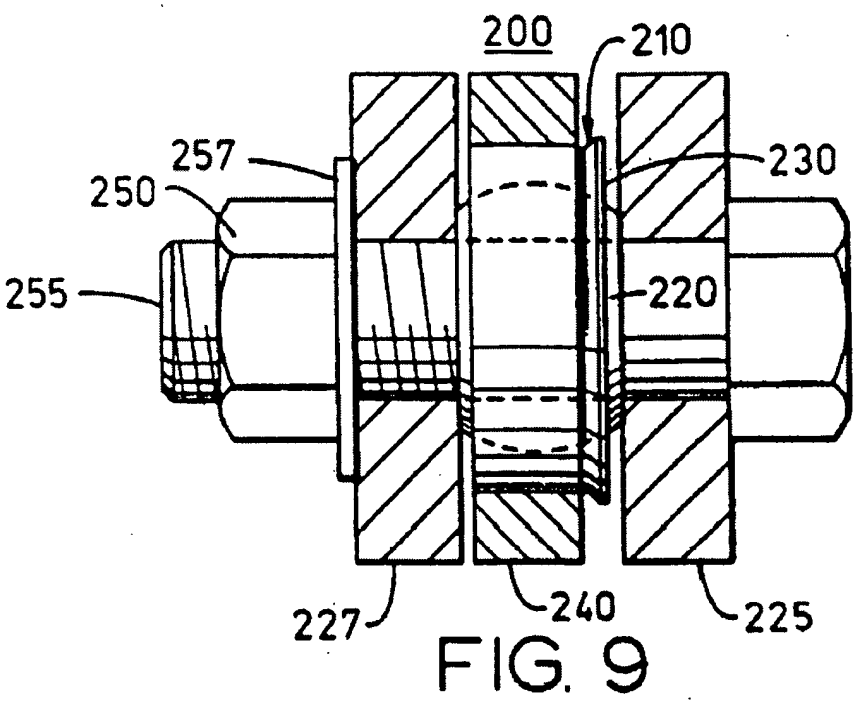


FIG. 9

Fig. 9 of U.S. Patent No. 4,994,660 to Hauer

Hauer's express statements about the universal joint demonstrate that it cannot be used in the manner required by both Schlamadinger and Yogo because it will not accommodate the positioning or range of motion required by the references with which it is proposed to be combined. Thus, no prima facie case of obviousness has been made because the asserted combination is inoperative. These same facts also negate any reasonable expectation of success based upon the asserted combination. For at least these reasons, the Board should reverse the second obviousness rejection.

In support of the second obviousness rejection, the Examiner also asserts that the motivation or suggestion to combine Hauer with Schlamadinger as modified by Yogo is "to improve the performance of the joint in the modified Schlamadinger device." This assertion is incorrect. As already pointed out above in section VI.D, the joint of the

modified Schlamadinger device is limited to movement in a single plane. Even if the combination of Hauer and Schlamadinger was not inoperable, there would be no performance improvement if the universal joint of Hauer was combined with the modified Schlamadinger device. To the contrary, the ability of the universal joint of Hauer to accommodate limited movement outside a single plane would be entirely wasted in the asserted combination. Thus, the Examiner's asserted suggestion or motivation to combine references is incorrect. Nor is there any other suggestion or motivation for the proffered combination. For at least this additional reason the Board should reverse the second obviousness rejection.

As an additional matter, Applicant notes that a reference asserted in a rejection under 35 U.S.C. § 103 "must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992). The Hauer reference is emphatically not in the field of the application's endeavor. The Hauer reference "relates generally to vectorable nozzles and, more particularly, to vectorable axisymmetric variable exhaust nozzles for gas turbine engines." Hauer, col. 1, ll. 7-9 ('Field of the Invention"). To the contrary, the present application "relates to a turbocharger incorporating a wastegate and wastegate actuator, and in particular to the manner in which the actuator is connected to the wastegate." Application, page 1 ("Field of the Invention").

When a reference is in a different field of endeavor, it may still be reasonably related if "because of the matter with which it deals, logically would have commended

itself to an inventor's attention in considering his problem." *In re Clay*, 966 F.2d 656, 659, 23 USPQ2d 1058, 1060-61 (Fed. Cir. 1992). To meet this standard, however, the asserted logical connection cannot be based on an overbroad generalization. For example, in *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992), the applicant claimed an improvement in a hose clamp which included a hook which maintained the preassembly condition of the clamp and disengaged automatically when the clamp was tightened. The Board relied upon a reference which disclosed a hook and eye fastener for use in garments, reasoning that all hooking problems are analogous. The court held the reference was not within the field of applicant's endeavor, and was not reasonably pertinent to the particular problem with which the inventor was concerned because a person of ordinary skill, seeking to solve a problem of fastening a hose clamp, would not be reasonably be expected to fasteners for garments. *See,* MPEP § 2141.01(a)IV.

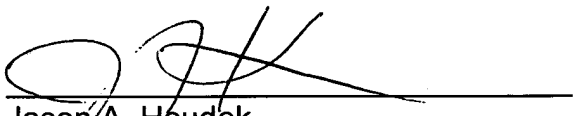
The Examiner in this case has engaged in the same type of impermissible generalization as in *In re Oetiker*. The Examiner asserts that "Hauer teaches that it is conventional ***in the linking mechanism art***, to utilize the pivot joint being spherical ..." Final Office Action, p. 8 (emphasis added). This assertion incorrectly presumes that all linking mechanisms address similar problems. If fact, the technical problem addressed by Hauer is not reasonably related to that of the present application. Hauer is concerned with positioning flaps of a gas turbine engine exhaust nozzle to vectorize thrust and control the movement of an aircraft. The present application is concerned with opening and closing a wastegate valve. The dissimilarity of these two problems is

such that Hauer does not logically commend itself to a person of skill in the art. For at least this additional reason, Hauer cannot be used as the basis for a rejection under 35 U.S.C. § 103.

VIII. CONCLUSION

For the reasons set forth above, reversal of the rejections discussed above by the Appeal Board is hereby requested. Applicant respectfully requests that the provisional rejection of claim 1 of the present application over claim 1 of U.S. Patent No. 6,658,846 based upon the doctrine of nonstatutory obviousness-type double patenting be reserved until claim 1 has been indicated to be allowable.

Respectfully submitted,



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CLAIMS APPENDIX

1. An apparatus comprising:

an actuator rod for a turbocharger pressure control assembly, the actuator rod comprising a first elongate portion defining a first rod end, and a second portion defining a second rod end, said first and second portions being pivotally joined to one another to allow a degree of relative pivotal motion between said two portions in at least one plane containing the axis of said elongate first portion; and

a lever arm fixedly connected to said second portion of the actuator rod.

2. The apparatus as claimed in claim 1, wherein the pivotal joint between said first and second portions allows pivotal motion in at least two orthogonal planes containing the axis of said first elongate portion.

3. The apparatus as claimed in claim 2, wherein the pivotal joint is a spherical joint.

4. The apparatus as claimed in claim 3, wherein said spherical joint comprises a spherical formation defined by one of said first and second portions, and a socket defined by the other of said first and second portions to receive said spherical formation.

5. The apparatus as claimed in claim 41, further comprising a pneumatic actuator connected to said first rod end.

6. The apparatus as claimed in claim 5, wherein the pneumatic actuator comprises a spring loaded diaphragm housed within a pressure chamber, said diaphragm being attached to said first rod end.

7. The apparatus as claimed in claim 61, further comprising a valve assembly, end of said actuating rod being connected to said actuator and the other end being connected to said valve assembly, whereby the pneumatic actuator controls operation of the valve assembly via the actuator rod.

8. The apparatus as claimed in claim 7, wherein the valve assembly further comprises a lever arm extending from and connected to a valve, said second portion of the actuator rod being secured to said lever arm extending from the valve assembly by way of which the valve is operated.

9. (Cancelled)

10. A method of assembling a pressure control assembly of a turbocharger, the turbocharger comprising a turbine housing and a compressor, the pressure control assembly comprising a valve assembly mounted within the turbine housing, a pneumatic actuator mounted to the turbocharger to receive pressurised air from the compressor, an actuator rod extending from the pneumatic actuator, and a lever arm extending from the valve assembly and the turbine housing and linking the actuator rod to the valve assembly, wherein the actuator rod is a rod comprising a first elongate portion defining a first rod end, and a second portion defining a second rod end, said first and second portions being pivotally joined to one another to allow a degree of relative pivotal motion between said two portions in at least one plane containing the axis of said elongate first portion, the method comprising:

assembling the valve assembly and lever arm on the turbine housing;

assembling the pneumatic actuator and actuator rod as a sub-assembly;

mounting the pneumatic actuator/actuating rod sub-assembly to the turbocharger; and

securing the second portion of the actuator rod to the lever arm.

11. The method according to claim 10, wherein the actuator rod is secured to the lever arm by welding or otherwise bonding.

12. The method according to claim 11, wherein prior to securing the actuator rod to the lever arm, the valve assembly is held in a closed position by appropriate clamping of the lever arm and said pneumatic actuator is pressurised to a predetermined pressure, thereby to determine the minimum pressure at which said valve will in use begin to open.

13. The method according to claim 10, wherein said first and second portions of the actuator rod are pivotally joined to one another to allow a degree of relative motion between the two in at least two orthogonal planes containing the axis of said first portion.

14. An actuator rod for a turbocharger pressure control assembly, the actuator rod comprising a first elongate portion defining a first rod end, and a second portion defining a second rod end, said first and second portions being pivotally joined to one another to allow a degree of relative pivotal motion between said two portions in at least two orthogonal planes containing the axis of said elongate first portion.

15. The apparatus as claimed in claim 14, wherein the pivotal joint is a spherical joint.

16. The apparatus as claimed in claim 15, wherein said spherical joint comprises a spherical formation defined by one of said first and second portions, and a socket defined by the other of said first and second portions to receive said spherical formation.

17. The apparatus as claimed in claim 14, further comprising a pneumatic actuator connected to said first rod end.

18. The apparatus as claimed in claim 17, wherein the pneumatic actuator comprises a spring loaded diaphragm housed within a pressure chamber, said diaphragm being attached to said first rod end.

19. The apparatus as claimed in claim 14, further comprising a valve assembly, end of said actuating rod being connected to said actuator and the other end being connected to said valve assembly, whereby the pneumatic actuator controls operation of the valve assembly via the actuator rod.

20. The apparatus as claimed in claim 14, wherein the valve assembly further comprises a lever arm extending from and connected to a valve, and second portion of the actuator rod being secured to said lever arm extending from the valve assembly by way of which the valve is operated.

EVIDENCE APPENDIX

NONE

RELATED PROCEEDINGS APPENDIX

NONE